

REMARKS

The present communication is filed in response to the Official Action mailed June 5, 2006, finally rejecting all the claims presently pending in the application ("Official Action"). Claims 1, 3-11, and 13-20 are pending in the application. Of these claims, claims 1 and 11 are independent based claims. All the other claims pending in the application depend from one of the independent claims.

A two-month extension of the time to respond, up to and including November 5, 2006, is filed concurrently herewith.

In the summary to the Official Action, the Examiner indicated that the Official Action was final. As the Official Action was mailed after applicants' filing of an RCE and cites new art, applicants respectfully request that the finality of the action be withdrawn.

Claim Amendments

Claims 1, 3, 4, 6, 11, 13, 14 and 15 have been amended to now recite "unique node identification numbers." Support for the foregoing amendments may be found by reference to, for example, page 17, lines 12-15 of the original specification. Support may also be found by reference to paragraph [0055] of the Substitute Specification filed on March 25, 2004. Applicants therefore respectfully submit that the amendments to the claims do not constitute the addition of new matter to the application.

Claim Rejections — 35 U.S.C. §112

The Examiner rejected claims 1 and 11 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement. (Official Action at 2.) In particular, the Examiner noted that "the specification does not explicitly state that this 'ID number' is synonymous with the

'Node Unique ID' as shown in step S5 in Fig. 8A and thus corresponds with the claimed 'node identification number', and furthermore, in particular applicant uses various terms that are not necessarily interchangeable based on the specific definitions." (*Id.* at 3.)

The Examiner further noted that although the term "Node Unique ID" was used in Fig. 8A of the drawings, "this term was not at all found in the specification." (*Id.*) The Examiner thought that this point was of particular importance since in the art of bus technology the terms "Node Unique ID" and "Unique Node ID" are not necessarily interchangeable or synonymous. (*Id.* at 3.)

Although applicants agree that the terms Node Unique ID and Unique Node ID are not necessarily interchangeable or synonymous, applicants respectfully submit that the specification is clear in its use of the term node identification number. Specifically, the specification states that "0" to "63" are available as node ID numbers in accordance with the IEEE 1394 specification. (Original Specification, p.13, 11.13-14.) The term "node ID numbers" directly translates to node identification numbers. Furthermore, the specification states "The ID number of the node is automatically allocated when the equipment is connected to the bus of IEEE 1394." (*Id.* at 11.15-16.) These node ID numbers may be registered and stored in non-volatile memory 60. (*Id.* 11.17-22.)

Therefore, the written description is clear in stating that node identification numbers or node ID numbers comprise the numbers that are allocated to each node based on the IEEE 1394 standard. These node ID numbers range from 0-63 with the last node number being used for broadcasting. The *Fujimori* reference called these numbers Unique Node IDs. As is explained in further detail below, U.S. Patent 5,764,930 to Staats ("Staats") does not use the term Unique Node ID. Rather, that reference

uses the term node bus address to refer to these numbers as the logical address of a node on a bus.

Both *Fujimori* and *Staats* use the term Node Unique ID. Both references appear to use the term synonymously to refer to an identifier that is set by a vendor or manufacturer. Further, both references make it clear that the Node Unique ID does not change on a bus reset or system reset. (*Staats*, col.2, 11.63-67; *Fujimori*, col.9, 11.17-20.) In Fig. 8A at step S5, the term "NODE UNIQUE ID" is used. In describing Fig. 8A, the specification states, however, that "If the number of equipment connected to the bus is equal to or less than 5 in step S3, the unique ID numbers of the nodes of the equipment connected to the bus are discriminated (Step S5.)" (Original Specification, p.17, 11.12 - 15 (Emphasis Added).) Thus, according to this portion of the written description, it's the Unique Node IDs that are discriminated. This description is consistent with the remainder of the specification.

Applicants respectfully submit that to the extent that there is any ambiguity between the term "NODE UNIQUE ID" which appears in Fig. 8A and the description of that figure on page 17 of the original specification (paragraph [0055] of the Substitute Specification), the description makes it clear that it's the unique ID numbers of the nodes or Unique Node ID numbers that are discriminated at step S5. Further, applicants respectfully submit that the specification further makes it clear that it is the Unique Node ID numbers that are allocated (see p.2, 11.21-25), not the Node Unique ID. In addition, applicants' use of the term node identification numbers in the claims is consistent with both *Fujimori's* and *Staats's* use of Unique Node IDs and further in light of applicants' specification.

However, in order to clarify any ambiguity that may exist in the claims, applicants have amended the claims to now

recite "unique node identification numbers." As discussed above, applicants respectfully submit that this term is fully supported by the specification.

Claims Rejections - 35 U.S.C. §103

The Examiner rejected claims 1 and 11 under 35 U.S.C. §103(a) as being unpatentable over EP Patent 0 852 402 A to Yoshino, et al. ("Yoshino") in view of the *Staats* reference. (Official Action at 2.) Except for claims 9 and 19, the Examiner rejected all the other claims pending in the application over the foregoing combination of the *Yoshino* and *Staats*. With regard to claims 9 and 19, those claims were rejected over the combination of *Yoshino* and *Staats* further in view of U.S. Patent 6,507,953 to Horlander, et al. ("*Horlander*"). (*Id.*)

In rejecting claims 1 and 11, the Examiner acknowledged "*Yoshino* operates according the standard IEEE 1394 Protocol, wherein upon a bus reset, the node IDs of all of the nodes may be changed". (*Id.* at 5.) The Examiner asserts, however, that *Staats* overcomes the limitations of *Yoshino* and the IEEE 1394 Protocol "by assigning a node reference ID to each node, along with its IEEE 1394 Protocol address, i.e., node base address, see col. 3, lines 1-20 & col. 5, lines 3-15, which reads on the claimed 'register for allocating node ID numbers'." (*Id.*)

The Examiner further asserts that since *Staats* teaches that the node reference ID is stored in memory, that teaching reads on the claimed "register for storing a record of the node ID numbers allocated to the selected device." (*Id.*) The Examiner continues by stating that *Staats* teaches that after a bus reset, the original node reference ID is re-associated with node unique ID based on a pointer, therefore *Staats* teaches the claimed feature of "maintaining the record regardless of whether

the selected device remains connected to the digital interface', see col.8, lines 1-60." (*Id.* at 6.) The Examiner therefore concludes that it would have been obvious to modify Yoshino to use a node reference ID as taught by Staats to provide the feature of allowing bus transactions to be transparent to bus resets.

Staats uses three different terms in his patent. Those terms are: (1) node unique ID; (2) node reference ID; and (3) node bus address. (*Staats*, col.2, ll.58-59.) As previously discussed, the node unique ID is set by a vendor or manufacturer and is invariant to or does not changes in response to bus or system resets. (*Id.*, ll.63-67.)

Node reference IDs are "created by initialization software which runs at the time of systems start-up." (*Id.* col.3, ll.1-3.) Node reference IDs are "bus reset invariant but are subject to change across system resets." (*Id.*, ll.3-5.)

Node base addresses are the logical address of a node within the bus address space and are generated according to the IEEE 1394 bus standard. (*Id.*, ll.15-20.) "Node base addresses are subject to change across bus resets and systems resets." (*Id.*, ll.18-20.) Node base addresses are Unique Node IDs.

Staats provides for "reset transparency from the point of view of a driver which initiates a bus transaction." (*Id.*, col.5, ll.4-6.) Staats achieves his results by, as noted by the Examiner, creating data records that associate a node base address with a corresponding node unique ID. (*Id.*, ll.6-8.) These records are stored in memory and are accessed each time a bus transaction is initiated. (*Id.*, ll.8-10.)

Node reference IDs serve as pointers to the data records. Upon a bus reset, base addresses change, but the node reference IDs do not change. Thus, after a bus reset the node reference IDs are used to point to the previously created records based on the node unique ID in the record. "If a bus

reset occurs while the bus transaction is pending, the device data records are updated to reflect a new node base addresses." (*Id.*, 11.28-30.) Thus, the reference IDs serve as a pointer to the records so that the new base addresses may be associated with the appropriate node unique IDs.

That operation, however, is distinguishable from the claimed invention. In particular, the node base addresses are the unique node identification numbers of the claimed invention. Since *Staats* clearly teaches that the base addresses change after a bus reset occurs, *Staats* previously created record is not maintained "regardless of whether said selected device remain connected to said digital interface," as is recited in the claims. Specifically, after a bus reset, *Staats* requires that the previously stored record be changed to reflect new base addresses. But that is not what applicants have claimed.

In particular, claim 1 recites "maintaining said record regardless of whether said selected device remains connected to said digital interface." Claim 11 recites "storing a record of said unique node identification number for said selected device regardless of whether said selected device remains connected to the digital interface." In contrast, in *Staats* system, removal or connection of a device causes a bus reset. That results in the node base addresses being changed. That change requires the record associated with a particular node unique ID to be updated. The node reference ID simply provides a pointer that allows the new base address to be associated with the appropriate node unique ID. However, *Staats*, *Fujimori* and the IEEE 1394 standard have the same shortcoming. That is, Unique Node IDs must be updated after a bus reset.

Therefore, applicants respectfully submit that claims 1 and 11 are clearly distinguishable over *Staats* for at least the foregoing reasons. Accordingly, applicants respectfully

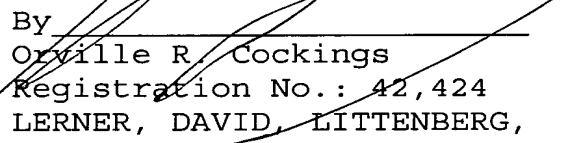
request that claims 1 and 11 be allowed. Further in that regard, as all the other claims pending in the application depend from either claim 1 or 11, applicants respectfully submit that these claims are also allowable for at least the foregoing reasons and earnestly request same.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: November 6, 2006

Respectfully submitted,

By 
Orville R. Cockings
Registration No.: 42,424
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK, LLP
600 South Avenue West
Westfield, New Jersey 07090
(908) 654-5000
Attorney for Applicants